

What is claimed is:

1. A method for reducing interference signal influences on a high-frequency measurement device, in particular a method for operating a high-frequency position
5 finder, in which an analog measurement signal (22) detected by a receiver unit (23) of the high-frequency measurement device is supplied to at least one analog/digital converter (28) of an evaluation unit for the measurement signal (22), wherein the scan rate of the at least one analog/digital converter (28) is varied as a function of an interference signal measurement value correlated with the interference
10 signals.
2. The method as recited in claim 1,
wherein the scan rate of the at least one analog/digital converter (28) is changed if the interference signal measurement value correlated with the interference signals exceeds
15 a threshold value.
3. The method as recited in claim 1 or 2,
wherein the interference signal measurement value correlated with the interference signals is measured with the aid of the receiver unit (23) of the measurement device.
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4. The method as recited in claim 3,
wherein the measurement of the interference signals with the changed scan rate of the at least one analog/digital converter (28) is repeated if the measurement value correlated with the interference signals exceeds a predeterminable threshold value.
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5. The method as recited in claim 3,
wherein the measurement of the interference signals with the changed scan rate of the least one analog/digital converter (28) is repeated until a scan rate with a minimum interference influence is achieved.
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6. The method as recited in one of the preceding claims,

wherein the scan rate of the at least one analog/digital converter (28) is varied, starting from a high scan rate and moving toward lower scan rates.

7. The method as recited in one of the preceding claims,

5 wherein during a measurement of the interference signals, the entire spectrum of interference signal frequencies that the bandwidth of the receiver unit (23) is capable of detecting is used in order to determine the measurement value correlated with the interference signals.

10 8. The method as recited in one of the preceding claims 1 through 6, wherein in a measurement of the interference signals, selective interference signal frequencies within the bandwidth of the receiver unit (23) are used in order to determine the measurement value correlated with the interference signals.

15 9. The method as recited in one of claims 7 or 8, wherein the frequency spectrum detected during a measurement of the interference signals is evaluated and the resulting measurement value correlated to the interference signals is compared to a predeterminable threshold value.

20 10. The method as recited in one of the preceding claims, wherein before a measurement for locating objects (20), at least one measurement is carried out to identify interference signals.

11. The method as recited in one of the preceding claims,

25 wherein a variably adjustable component (34) of the receiver unit (23), which component influences the signal amplitude of the measurement signal (30), is set in accordance with the interference signal measurement value correlated with the interference signals in order to prevent a clipping of the measurement signal to be evaluated from occurring in the receiver branch.

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12. A high-frequency measurement device, in particular a hand-held measurement device for locating objects (20), having a transmitter unit (19) for generating and

transmitting a measurement signal (16), having a receiver unit (23) for detecting a returning measurement signal (22), and having a control and evaluation unit that includes at least one analog/digital converter (28) for a measurement signal (22) detected by the receiver unit (23), which measurement signal is scanned for further
5 signal processing,
wherein the scan rate of the at least one analog/digital converter (28) is variably adjustable.

13. The high-frequency measurement device as recited in claim 12,
10 wherein the measurement signal (16) generated by the transmitter unit (19) has more than one measurement frequency.

14. The high-frequency measurement device as recited in claim 12,
wherein at least one measurement frequency of the measurement signal (16) generated
15 by the transmitter unit (19) lies in a range from 100 MHz to 10,000 MHz, in particular in a range from 1,000 MHz to 5,000 MHz, and preferably in a range from 1,500 MHz to 3,500 MHz.

15. The high-frequency measurement device as recited in claim 12,
20 wherein a microcontroller (36) is provided, which controls the variation of the scan rate of the least one analog/digital converter (28).